

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

August 4, 2017

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Kate Ingram Sr. Prod Reg Specialist Solenis LLC 500 Hercules Road Wilmington, DE 19808

Subject: Notification per PRN 98-10 – Revising the Directions for Use

Product Name: Biosperse 550 Microbiocide

EPA Registration Number: 74655-31

Application Date: 07/27/2017 Decision Number: 531973

Dear Ms. Ingram:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division (AD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, you may contact Aline Heffernan at 703-347-8602 or via email at heffernan.aline@epa.gov.

Sincerely,

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Zeno Bain, Product Manager 33 Regulatory Management Branch I Antimicrobials Division (7510P) Office of Pesticide Programs

BiosperseTM 550 Microbiocide

NOTIFICATION

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The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

08/04/2017

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC AMINALS DANGER

Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if inhaled. May be fatal if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Causes asthmatic signs and symptoms in hyper-reactive individuals.

Do not get in eyes, on skin, on clothing.

Avoid breathing vapor. Do not swallow.

Wear goggles, protective clothing and butyl or nitrile gloves.

Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

STORAGE AND HANDLING

This product is incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin and zinc. This product can be stored and handled in baked phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-plastic equipment. This product freezes at about -6°F (-21°C). Therefore, unless the storage tank is inside or underground, heating and insulation may be required. If heating is needed, exposure to high temperature should be avoided. For short storage times (up to about 1 month), temperatures of up to 100°F (37.8°C) can be tolerated but the preferred maximum storage temperature is about 80°F (26.7°C).

A stainless steel centrifugal pump is suggested for transfer service. Spiral-wound stainless steel with TEFLON® Polymer is suitable for gaskets and packing.

Handle in a well-ventilated area. If vapors are irritating to the nose or eyes, special ventilation or respiratory protection (MSHA/NIOSH approved air purifying respirator equipped with an organic vapor cartridge) may be required.

STORAGE AND DISPOSAL

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or your Environmental Control Agency, or the Hazardous Wastes representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Nonrefillable Container. Do not reuse or refill this container. Triple or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures approved by state and local authorities. Offer for reconditioning, if appropriate.

FOR CONTAINERS GREATER THAN 5 GALLONS: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto is other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

<u>FOR CONTAINERS UP TO 5 GALLONS:</u> Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour

rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times.

KEEP OUT OF REACH OF CHILDREN DANGER

FIRST AID

If Swallowed: Call a poison control center or a doctor immediately for treatment advice. DO NOT INDUCE VOMITING. Do not give anything to drink.

If In Eyes: Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. Call a poison control center or a doctor immediately for treatment advice.

If On Skin Or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or a doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or a doctor for further treatment advice.

NOTE TO PHYSICIAN: Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

Have the MSDS and, if available, the product container or label with you when calling a poison control center or a doctor, or going for treatment.

FOR EMERGENCY INFORMATION CALL 1-844-SOLENIS (1-844-765-3647)

Produced for **Solenis LLC**

Solenis LLC 500 Hercules Rd Wilmington, DE 19808 (302) 594-5000 Emergency Phone Number 1-844-SOLENIS (1-844-765-3647)

Made in USA

EPA Reg. No. 74655-31
EPA Est. No. 10352 WV-2(A); 464 WV-1(B)
(A) 5 gallon pails in pallets: all drums, bulk
(B) Sample, 5 gallon pails less than full pallet

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS / RECIRCULATING COOLING AND PROCESS WATER SYSTEMS

This product may be used only in industrial air washers and air washer systems which have mist-eliminating components.

This product should be added at the application rates described below to a water treatment system at a convenient point of uniform mixing such as the basin area. Addition may be made intermittently (SLUG DOSE) or continuously. Badly fouled systems can be shock treated with this product. Under these conditions, blowdown should be discontinued for up to 24 hours.

This product can be used in industrial process water systems that contain ultra filtration units and non-medical reverse osmosis membranes (where approved for compatibility by the membrane manufacturer) and associated distribution systems.

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INTERMITTENT (SLUG DOSE) METHOD

Initial Dose: When the system is noticeably fouled, apply 11.3 to 22.7 fl.oz (100 to 200 ppm product) of this product per 1000 gallons of water in the system, or 89 to 177 mL of this product per 1000 liters of water in the system. Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add 4.5 to 11.3 fl.oz. (40 to 100 ppm) of this product per 1000 gallons of water in the system weekly, or 35 to 89 mL of this product per 1000 gallons of water in the system weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled, apply 11.3 to 22.7 fl.oz (100 to 200 ppm product) of this product per 1000 gallons of water in the system, or 89 to 177 mL of this product per 1000 liters of water in the system.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 2.3 to 11.3 fl.oz. (20 to 100 ppm product) of this product per 1000 gallons of water in the system per day or 17.7 to 88.6 mL of this product per 1000 liters of water in the system per day.

Badly fouled systems must be cleaned before treatment is begun.

SERVICE WATER AND AUXILIARY SUSTEMS

This product should be used at the same application rates, and in the same manner as described above. It should be added to the system at a point that will allow for uniform mixing throughout the system.

HEAT TRANSFER SYSTEMS

(Evaporative Condensers, Dairy Sweetwater Systems, Hydrostatic Sterilizers and Retorts, and Pasteurizers and Warmers)

This product should be used at the same application rates and in the same manner as described above. It should be added to the system at a point of uniform mixing such as a basin area, sump area or other reservoir or collecting area from which the treated water will be circulated uniformly throughout the system.

INDUSTRIAL WASTE WATER SYSTEMS

(Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks)

This product should be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 0.4 to 2.0 gallons (450 to 2250 ppm product) of this product per 1000 gallons of wastewater of sludge or 399 mL to 1994 mL of this product per 1000 liters of wastewater of sludge.

BEET SUGAR MILLS AND BEET SUGAR MILL PROCESS WATER SYSTEMS

This product should be added to the system at a point of uniform mixing such as the diffuser, transport water pump, weir box, or diffuser feed water pump. Additions may be made intermittently (SLUG DOSE) or continuously.

INTERMITTENT (SLUG DOSE) METHOD

Initial Dose: When the system is noticeably contaminated, add 5.4 to 13.6 fl.oz. (200 to 500 ppm product) of this product per ton or 177 to 422 mL this product per metric ton of sliced beets as a slug dose. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.8 to 8.2 fl.oz. (30 to 300 ppm) of this product per ton or 27 to 270 mL of this product per metric ton of sliced beets in the system as a slug dose as necessary to maintain control. The total should not exceed 106 gallons per 1000 tons of beets sliced per day.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably contaminated, add 5.4 to 13.6 fl.oz/min (200 to 500 ppm product) of this product per ton or 177 to 422 mL/min of this product per metric ton of beets sliced per minute in the system via automatic pump of suitable construction.

Subsequent Dose: When microbial control is evident, add 0.8 to 8.2 fl.oz/min (30 to 300 ppm product) of this product per ton or 27 to 270 mL/min of this product per metric ton of beets sliced per minute, or as necessary to maintain control. The total should not exceed 106 gallons per 1000 tons of beets sliced per day.

PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS

This product should be added to the paper making system at a point of uniform mixing such as the beaters, broke chest pump, save-all tank, or white-water tank.

Initial Dose: When the system is noticeably contaminated, add 0.5 to 3.0 lbs of this product per ton of pulp or paper (dry basis) as a slug dose. Repeat until control is achieved. Heavily fouled systems should be boiled out prior to initial treatment.

Subsequent Dose: When microbial control is evident, add 0.3 to 2.0 lbs of this product per ton of pulp or paper (dry basis) as a slug dose as necessary to maintain control.

PIGMENTS AND FILLER SULRRIES FOR PAPER AD PAPERBOARD

(For use in food and non-food contact pigments and filler slurries)

Use from 0.1 to 0.6 lbs. this product per 1000 lbs of dry powder to produce a concentration from 100 to 600 ppm as product (based on slurry solids) in the mixed slurry.

WATER BASED COATINGS FOR PAPER AND PAPERBOARD

NOTE: for use in non-food contact coatings only.

Use from 0.1 to 0.6 lbs. this product per 1000 lbs of dry powder to produce a concentration from 100 to 600 ppm as product (based on slurry solids) in the mixed slurry.

AQUEOUS METALWORKING FLUIDS

This product should be added to a metalworking fluid system at a point of uniform mixing such as the fluid collection tank. Additions may be made intermittently (SLUG DOSE) at intervals of one week or less.

Initial Dose: When the system is noticeably fouled apply 1.8 to 5.4 gallons of this product per 10,000 gallons of metalworking fluid to the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.7 to 3.6 gallons of this product per 10,000 gallons of metalworking fluid to the system weekly, or as needed to maintain control. Badly fouled systems should be cleaned before treatment if begun.

WATER BASED CONVEYOR LUBRICANTS

(Brewery, Juice, Dairy, Beverage, and Food Processing Systems)

Avoid contamination of food in application of product.

Thoroughly clean all tracks and conveyors to remove gross soil. Rinse well. Use an automatic feed system to provide 1.1 to 6.8 fl.oz. (50 to 300 ppm active) of this product per 100 gallons of diluted lubricant.

GENERAL PRESERVATIVE USE

This product is recommended for use in aqueous or water containing products and systems, including industrial, institutional and consumer in-can processes and products to control the growth of bacteria and fungi. For effective preservation, add this product to the product formulation at a rate of 0.02% to 0.20% (200 to 2000 ppm) based on the water content of the product (0.2 to 2.0 lbs this product per 1000 lbs water content). Mix uniformly.

PRESERVATIVE FOR CONCENTRATES

For use in concentrates where effective preservation is needed after dilution, add this product to the product formulation at a rate such that the diluted end-use product will contain 0.02% to 0.20% of this product.

At no time during the preservation process should the level of this product exceed 2.0%.

REVERSE OSMOSIS MEMBRANES

For effective preservation of reverse osmosis elements (where approved for compatibility by membrane manufacturer), immerse elements in a tank containing 0.2% to 2.0% this product. This product can also be added to in-line recirculating systems for preservation of installed out-of-service reverse osmosis equipment (where approved for compatibility by membrane manufacturer). Add 0.2% to 2.0% this product to the tank in the circulating system. Maintain the concentration of this product by periodic addition to counteract any system leakage.

CONCRETE ADMIXTURES

For effective preservation of concrete admixtures, add this product to the product formulation at a rate of 2000 to 8000 ppm based on the weight of the admixture (2.0 to 8.0 lbs this product per 1000 lbs. concrete admixture). Mix uniformly.

WATER FLOODS

This product should be added to a water flood system at a point of uniform mixing.

Initial Treatment: When the system is noticeably contaminated, add 100 to 5000 ppm this product to the system (0.09 to 4.4 gallons this product per 1000 gallons flood water). Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 20 to 5000 ppm this product (0.02 to 4.4 gallons this product per 1000 gallons flood water) to the system weekly, or as needed to maintain control.

FRAC FLUIDS

This product reduces bacterial contamination and degradation of fracturing fluids and gels used in oil and gas well stimulations. Add this product to the frac water storage tanks or directly into the well head injection pipeline as the water is being pumped down-hole.

Dose Range: This product should be added at a rate of 100 to 5000 ppm (0.9 - 44.3 gals per 10,000 gallons) depending on the degree of bacterial fouling in the source water.

DRILLING, COMPLETION, AND WORKOVER FLUIDS

This product should be added to a drilling fluid system at a point of uniform mixing such as the circulating mud tank. Initial Treatment: Add 50 to 1000 ppm this product (0.2 to 3.7 gallons this product per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination.

Maintenance Dosage: Maintain a concentration of 50 to 1000 ppm this product by adding 0.2 to 3.7 gallons of this product per 100 barrels of additional fluid, or as needed, depending on the severity of contamination.

PACKER FLUIDS

This product should be added to a packer fluid at a point of uniform mixing such as a circulating holding tank. Add 50 to 600 ppm this product (0.2 to 2.2 gallons this product per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination. Seal the treated packer fluid in the wall between the casing and production tube.

OIL AND GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS

This product should be added to an oil/gas production or transmission line via direct injection. The application should be conducted to ensure maximum distribution of this product throughout the entire internal pipeline surface by adding a sufficient amount of biocide to detect/measure a residual concentration at the back end of the pipeline system. Criteria for success of the treatment will be a reduction in bacterial counts and/or reduced corrosion rates. To facilitate application it may be desirable to dilute this product with an appropriate solvent immediately before use. The concentration in the solvent should not fall below an active concentration range of 500 to 5000 ppm based on the volume of water in the pipeline. Injections to the system should be weekly, or as needed to maintain control.

GAS STORAGE WELLS AND SYSTEMS

Individual injection wells should be treated with sufficient quantity of this product to produce a concentration of 500 to 5000 ppm this product when diluted by the water present in the formation. Injection should take place before gas is injected (during the summer). Injections should be repeated yearly, or as needed to maintain control.

Individual drips should be treated with a sufficient quantity of this product to produce a concentration of 200 to 2000 ppm this product when diluted by the water present in the drip. Injections should be repeated yearly, or as needed to maintain control.

HYRDOTESTING

Water used to hydrotest pipelines or vessels should contain 100 to 4000 ppm this product (0.09 to 3.5 gallons this product per 1000 gallons water), depending on water quality and length of time the equipment will remain idle.

PIPELINE PIGGING AND SCRAPING OPERATIONS

Add this product to a slug of water immediately following the scraper (ideally this water volume can be kept to a minimum and contained between the scraper and the trailing pig). Sufficient product should be added to produce a concentration of 0.1 to 1% (0.09 to 0.9 gallon this product per 100 gallons water), depending on the length of the pipeline and the severity of biofouling.

NOTE: Buyer assumes all responsibility for safety and use not in accordance with directions. To the Extent Consistent with Applicable Law.